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ANALYSIS OF THE EVOLUTION OF PRICES AND TRADE OF COMMODITIES TO BE EXPECTED IN THE LIGHT OF THE RESULTS OF THE URUGUAY ROUND, WITH PARTICULAR EMPHASISON THEIR IMPLICATIONS FOR DEVELOPING COUNTRIES, INCLUDING THEIR DIVERSIFICATION PROSPECTS

The Uruguay Round and international commodity trade and prices

Report by the UNCTAD secretariat

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A statistical annex, issued separately (in English only) as an addendum to this document (TD/B/CN.1/30/Add.1), contains the tables to which reference is made in the text.

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Abbreviations

ACP	African, Caribbean and Pacific (countries)
AMS	aggregate measurement support
APEC	Asia-Pacific Economic Cooperation
CAP	Common Agricultural Policy
CGE	computable general equilibrium
CIS	Commonwealth of Independent States
DME	developed market economy
DRI	direct-reduced iron
EEC	European Economic Community
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
GATT	General Agreement on Tariffs and Trade
GSP	Generalized System of Preferences
MFN	most favoured nation
MSA	Multilateral Steel Agreement on Trade Liberalization
NAFTA	North American Free Trade Agreement
NTB	non-tariff barriers
ODA	official development assistance
OECD	Organization for Economic Cooperation and Development
SPS	Sanitary and Phytosanitary Measures
TREMs	Trade-related environmental measures
UNCTAD	United Nations Conference on Trade and Development
URA	Uruguay Round Agreement
URAA	Uruguay Round Agreement on Agriculture
URASPS	Uruguay Round Agreement on Sanitary and Phytosanitary Measures
WTO	World Trade Organization

Explanatory notes

The term "billion" signifies 1,000 million.

The term "tons" refers to metric tons.

Use of a hyphen (-) between dates representing years, e.g. 1970-1972, signifies the full period involved, including initial and final years.

INTRODUCTION

1. Agenda item 4 of the fourth session of the Standing Committee on Commodities is addressed to "the evolution of prices and trade of commodities to be expected in the light of the results of the Uruguay Round, with particular emphasis on their implications for developing countries, including their diversification prospects." This study is submitted by the UNCTAD secretariat to assist the Committee in its examination of this important issue.

2. Even before the Uruguay Round Agreement (URA) was adopted, a number of studies had been undertaken both within and outside UNCTAD with the aim of assessing the Agreement's likely impact on the world economy, or on individual countries or economic sectors.1/ Since the adoption of the URA, this process of analysis has intensified. Several studies, using global or sectoral models, have attempted to estimate the direct and indirect effects of the URA on trade and prices of commodities and manufactures. These studies include, in particular, those prepared for the UNCTAD Ad Hoc Working Group on Trading Opportunities in the New International Trading Context, and those undertaken by the secretariats of the General Agreement on Tariffs and Trade (GATT), Food and Agriculture Organization of the United Nations (FAO), the World Bank and the Organization for Economic Cooperation and Development (OECD). Rather than embark on another modelling exercise, the present report makes use of the results of these various projections, as they relate to commodities. It differs, however, from the earlier studies in placing greater emphasis on specific commodities and issues of interest to developing countries, including tariff escalation; in dealing with specific commodities not covered elsewhere, particularly minerals and metals; and in looking at the Uruguay Round developments with a longer-term perspective, from the early 1970s. This report attempts in particular to address the following questions: Did trade control measures exist that hindered the efforts of developing countries to increase their exports of specific commodities in both raw and processed forms? If so, to what extent did specific commitments under the URA deal with the problem? and, as a corollary, what remains to be done in future negotiations?

3. An attempt has been made not only to focus on traditional commodity exports of interest to developing countries, but also to identify emerging dynamic markets for non-traditional commodities of potential interest to developing countries, particularly for the horizontal diversification of their production and exports. Efforts have also been made to indicate the size of the trade flows concerned, as well as, whenever possible, the approximate orders of magnitude for some expected changes. Owing to the considerations presented in the notes on methodology,2/ little attention has been devoted to the erosion of preferences enjoyed by developing countries under the GSP or under special preferential arrangements, e.g. EEC-ACP, as a result of the most favoured nation (MFN) tariff reductions agreed on in the Round.3/

4. This report is also based on in-depth studies that have been undertaken for a number of selected commodities by the UNCTAD secretariat, which will be available to the Committee as background documents. A short annotated bibliography has been issued separately (in English only) as addendum to this document (TD/B/CN.1/30/Add.2) briefly to review the various studies and documents, both within and outside UNCTAD, relating to the Uruguay Round and its implications, principally for commodities.4/

5. The present report constitutes only a first step in responding to the request of the Committee, as full and complete details of country implementation of the URA were not all known at the time of writing. Further guidance from the Committee with regard to future work in this area will be required.

PART ONE: GENERAL REVIEW

I. THE SETTING

6. Production and export of commodities *(throughout this report, commodities refer to all commodities excluding fuels)*5/ continue to be of vital importance to developing countries. They constitute their principal domestic economic activity and the material base for their industrialization, and account for the largest share of their foreign exchange earnings and government revenues. For practically all developing countries, except the newly industrialized countries, primary production (agriculture and mining) still accounts for more than 30 per cent of GDP compared to less than 5 per cent in the typical developed market economy country; this share is significantly higher for Sub-Saharan Africa and the least developed countries generally. Moreover, the great majority of the labour force of the developing countries depends for subsistence and income on the primary sector, against less than 5 per cent in developed market economy countries.

7. Overall, commodity exports of developing countries continue to be largely dominated by agricultural products (78 per cent of the total value). Food commodities, excluding tropical beverages, account for the bulk of their agricultural exports and for 54 per cent of their total commodity exports. Agricultural raw materials and tobacco account for 16 per cent, while tropical beverages account for only 8 per cent of total commodity exports of developing countries. Thus, over 90 per cent of commodity exports of developing countries competes directly and indirectly with commodity exports of developed countries, while over two-thirds of commodity exports of developing countries are, directly or indirectly, affected by the agricultural policies of the developed countries (see **table 1** of the statistical annex).

8. The European Union (EU), Japan and the United States together account for about 94 per cent of developed market economy (DME) countries commodity imports from developing countries, and, respectively, absorb 27, 16 and 13 per cent or together 56 per cent of all commodity exports of developing countries (see **table 2** of the statistical annex). Hence the concentration in this report on these three major markets, as a first step in the analysis of the impact of the Uruguay Round on commodity trade.

9. Commodity exports of developing countries, particularly agricultural commodities, generally faced more trade obstacles and were less subject to the rules and disciplines of GATT than industrial products. The liberalization of trade for commodities in their unprocessed forms which occurred in the early rounds of the GATT was not accompanied by corresponding liberalization for the processed forms of commodities, thus leading to steep tariff escalation and generally high levels of effective protection which for decades have hindered, if not prohibited, vertical diversification in developing countries through increased local processing before export of their commodities.

10. The share of developing countries6/ in world commodity exports (excluding fuels) has been consistently declining during the past two decades, from 31.5 in 1970-1972 to 25.4 per cent in 1990-1992 (see **tables 3 and 4** of the statistical annex). The market share thus lost by developing countries in international commodity trade (6.1 per cent) corresponds to about US$ 32 billion annually. In contrast, during the period considered, DME countries have significantly increased their share of world commodity exports from 58.8 to 68.4 per cent (from 25.0 to 37.7 per cent for the EU, from 12.4 to 12.8 per cent for the United States, with a decrease for Japan from 1.1 to 0.9 per cent, and for other DME countries from 21.4 to 17.8 per cent). Finally, countries in transition (Eastern Europe) have witnessed a sharp reduction in their export share, from 8.1 to 3.1 per cent, which has occurred gradually over the last two decades.

11. The support given by developed countries to their farmers and primary

product producers has risen steadily over the years. Total transfers associated with agricultural policies in DME countries were estimated by the OECD to amount in 1993 to US$ 335 billion, at about the same level as in 1991 and 1992, but 11 per cent above the 1990 level, 27 per cent above 1989, and in nominal terms about 15 times more than in 1970 (see **table 5** of the statistical annex which presents the evolution of these total transfers during the last two decades). This total cost of domestic support to agriculture in the DME countries may be seen in perspective when compared with:

(a) The current flow of ODA (net official flow of financial resources from all DME countries to developing countries and to multilateral institutions, amounting to US$ 58 billion in 1993;

(b) The total annual value (US$ 65 billion on average in the period 1990-1992) of imports by all DME countries, from developing countries, of agricultural commodities other than tropical beverages, i.e. of agricultural commodities in direct or indirect competition with domestic production of like or competing commodities, whether protected or not;

(c) The value of total agricultural imports and exports of the DME countries from and to the world, excluding fishery and forestry products, which amounted annually on average in 1990-1992 to US$ 133 and 119 billion, respectively; and

(d) The total GDP and gross value added in agriculture in the OECD countries: in 1990, the gross value added in agriculture represented 2 per cent of total GDP in the OECD countries, approximately equal to the share of total agricultural transfers in total GDP.

12. These transfers have led to increased self-sufficiency in the countries concerned and, therefore, to reduced outlets not only for temperate-zone commodities produced in developing countries, but also for the other agricultural commodities grown in semi-tropical or tropical zones and which compete directly or indirectly with the agricultural temperate zone products, ranging from sugar to fruits and vegetable oils, for example. They have also often led to mounting surpluses which had to be disposed of with increasing subsidization on third markets, thus displacing imports from efficient producers and penalizing agricultural producers in importing countries.

13. The relative export performance of the commodity sector in developing countries was also affected by supply-side factors. The fact that major manufactures exporters among developing countries were able to increase their share in world commodity exports, although they were facing the same trade obstacles as other developing countries, or sometimes even more obstacles when they did not benefit from special preferences extended to other developing countries, clearly indicate that domestic policies have a significant role to play. In this context, the difference should be emphasized between the outcomes of policies aiming at protecting farmers and their terms of trade, and those which passively or otherwise (e.g. by taxing the agricultural producers) result in the deterioration of the domestic terms of trade of agricultural producers in favour of consumers in major cities. Access to technology and foreign investment also plays a significant role, more particularly for the minerals and metals sector.

II. IMPLICATIONS OF COMMODITY-RELATED AGREEMENTS UNDER THE URUGUAY ROUND AGREEMENT FOR COMMODITY PRICES AND TRADE

14. Production, consumption, prices and trade of commodities will be directly affected by the Uruguay Round Agreement (URA) through specific measures agreed on for individual commodities or agricultural and industrial sectors. In the light of the discussion in chapter I, special attention will be attached to the extent that the URA managed to reduce or remove these barriers to developing-country exports. Since by far the most important

barrier has clearly come from subsidised production in, and exports from, the developed countries, it is clear from the outset that potentially the most important result of the URA is its disciplines on domestic support and export subsidies.

15. The URA will also affect commodities indirectly, through the higher income growth expected to result from enhanced trade liberalization. Indeed, many studies conclude that the most important quantifiable effect of the URA will be its impact on overall world trade and income or welfare. According to the 1994 GATT projections, the liberalization of trade in goods under the URA would alone result in a total increase in world income by the year 2005 of US$ 109 to 530 billion per year at 1992 prices, depending on the various assumptions made.7/ According to the 1993 OECD projections, the total increase in annual world income after the initial transition period would amount to US$ 274 billion. Other studies reach figures varying between US$ 139 and 230 billion. This significant increase in world income and resulting increase in world demand for investment and consumption goods would certainly have significant positive implications for world commodity markets from which commodity exporting developing countries are likely to benefit. These overall gains, together with the improvement in the world trading environment which the conclusion of the URA entails, may indeed be more important than gains stemming from specific tariff reductions or other trade liberalization measures for individual commodities agreed upon under the Uruguay Round; however, they need to be treated with caution since they were based on assumptions about what the Uruguay Round would achieve, rather than the actual outcome.

16. These specific reductions and liberalizations need to be assessed in the context of the commodity-related measures agreed under the URA. The URA is actually composed of a number of agreements annexed to the Marrakesh Agreement. Since not all these agreements relate directly to commodities, a brief description of only the latter is provided below, together with a qualitative assessment of how these agreements may affect commodity trade.8/

A. Agreement on Agriculture

17. The Uruguay Round Agreement on Agriculture (URAA) provides for disciplines in four areas: market access, export subsidies, internal support, and sanitary and phytosanitary measures in compliance with the separate complementary Agreement on Sanitary and Phytosanitary Measures (URASPS). In addition, specific commitments to increase trade liberalization for agricultural commodities were expected to appear in country market access schedules, in accordance with the modalities agreed to in a separate document entitled "Modalities for the Establishment of Specific Binding Commitments under the Reform Programme" (GATT, MTN.GNG/MA/W/24, 20 December 1993).

18. Although it has limitations (see below), the URAA has brought agriculture under comprehensive, multilateral discipline for the first time. This has resulted in the transformation of the wide range of barriers facing international trade in agricultural products into transparent, albeit high, tariffs, and in the binding of all these tariffs. Thus, it has established an agreed standard base for future reductions. Perhaps most importantly, in light of the review in paras 9-13 above, it has put a limit on the escalating costs of domestic support and export subsidies that prevent the international market from assuming its role of efficiently allocating resources in this area. These are clearly major accomplishments of great potential significance.

1. Market access

19. **Reductions in existing tariffs**: Developed countries have agreed to reduce existing tariffs on agricultural products by 36 per cent on average, with a minimum tariff cut of 15 per cent for each product, phased in over a six-year period, 1995-2000. The respective levels of reduction for developing

countries are 24 and 10 per cent, phased in over a 10-year period, 1995-2004.

20. **Tariffication of non-tariff barriers (NTBs):** The URAA requires that NTBs (including quantitative import restrictions, variable levies, minimum import prices and restrictive licensing) be converted **by the countries concerned** into ordinary customs duties. The NTB tariff equivalent for a given product was defined to be equal to the difference between the average internal price for the product and a representative average world market price for the same or a similar product, during an agreed base period, 1986-1988. The tariffs resulting from tariffication are to be reduced according to the same schedule as existing tariffs. However, four elements diminish to a major extent, if they do not nullify, the effect of such reductions:

(i) The base period 1986-1988 selected for the calculation was characterized by the lowest world prices in recent decades for the agricultural products concerned, which leads to the difference between internally supported prices and world prices, which was to provide the tariff equivalent of the NTBs, being at its largest. Thus, the tariffs so calculated were higher than if a more recent reference period had been selected.

(ii) For many commodities, the tariffication process has resulted in tariffs so high, sometimes exceeding 200 or 300 per cent of the world price, that they are likely to remain rather prohibitive even after implementation of the total 36 per cent reduction under the URAA.**9/**

(iii) In the three major markets reviewed, the tariffs were generally expressed in terms of local currency per unit quantity (e.g. in ECU per ton). However, changes in the exchange rates among the major currencies have resulted in an appreciation of the ECU and the yen in relation to the US dollar between the average rates for 1986-1988 and the average rates for January 1994 to February 1995 equal to 8.2 per cent for the ECU and 44.5 per cent for the yen, i.e., in the latter case, higher than the 36 per cent reduction of the specific customs duty.**10/**

(iv) The URAA establishes, under its article 5, special safeguards for products subject to tariffication. It allows Members to impose an additional duty when the volume of imports of a specific agricultural product (designated in its schedule with the symbol "SSG") exceeds a trigger level, or when the import price for that product falls below a trigger level. By thus opening the door to a form of variable levy, these safeguards reduce the security offered by the binding of agricultural tariffs.

21. **Other market access commitments:** Anticipating the very high level of tariffs resulting from the tariffication process, the URAA guarantees a minimum level of access for products subject to tariffication, in order both to maintain current levels of imports on terms at least equivalent to those existing before, and to provide for a minimum level of additional access opportunities.**11/** Imports under the minimum access commitment will be subject to low or at least non-prohibitive tariffs. Annex 5 to the URAA provides for exemptions from tariffication, or special treatment, for some primary or processed agricultural products, under particular conditions.**12/** Japan and the Republic of Korea have taken advantage of this provision for delayed tariffication in the case of rice.

22. The GATT secretariat has estimated the volumes of increases in market access under these minimum access opportunity commitments (see **table 7** in the statistical annex). Most of these increases relate to temperate zone products, and, in most cases, they represent a minor percentage increase of world exports, often even below 1 per cent; exceptions relate to eggs, rice, some dairy products and meats. The total value of these increases is estimated to amount to approximately US$ 3.8 billion, of which cereals, dairy products, meat and eggs account for some 86 per cent. It should be noted, however, that these additional export opportunities are not in every case open to all

countries. Although minimum access commitments were to be made on an MFN basis, countries were allowed to count special arrangements as part of their minimum access commitments and to allocate their minimum access quotas to individual exporting countries having special arrangements with them. Moreover, it is entirely possible that the quantities allowed under the minimum access quotas may not actually be imported, particularly in the case of quotas allowed for certain commodities by countries that are themselves low-cost producers and major net exporters of the commodities in question. Thus, the simple summation of minimum access commitments is likely to overstate the actual impact on trade in the commodities in question.

2. Export subsidies

23. The URAA defines export subsidies for agricultural products as subsidies "contingent upon export performance" and provides in its article 9 a detailed list of such subsidies.13/ It requires that all members include in their Shedules commitments relating to ceilings both for the quantity of subsidized agricultural exports, and for budgetary outlays for these subsidies, on a product-specific basis. By the year 2000, developed countries must reduce the quantity of subsidized exports from a 1986-1990 base period by 21 per cent and budgetary outlays for export subsidies by 36 per cent.14/ However, while all export subsidies must, by 2000, meet the required reductions based on the level of subsidies in 1986-1990, developed countries, and they only, have the option, when establishing their ceilings for the intervening years between 1995 and 2000, to use as a starting level the higher of their 1986-1990 or 1991-1992 levels. In cases where export subsidies had reached in the early 1990s significantly higher levels than during the base period, this flexibility of choosing to start from the higher 1991-1992 levels allowed the countries concerned to escape having to implement large reductions during the first year of implementation of the URAA. This option (to avoid this so-called "front-loading of reductions") resulted in several cases in levels of subsidies that will be, during the first years of implementation of the URAA, actually higher than their average in 1986-1990. This could affect developing country exports of the commodities concerned negatively during the early years of the transition period. Moreover, the fact that the reduction of budgetary outlays and subsidized quantities was permitted to be established, not for individual commodities, but for groups of products, significantly reduces the transparency and predictability offered by the URAA with regard to future market conditions for specific commodities.

24. Commitments made under the URAA for actual reductions in both quantities of subsidized exports and budgetary outlays for each specific product and by each country are summarized in **tables 8 and 9**, respectively, of the statistical annex. From these, it should be noted that even after implementation of the agreed reductions, permissible annual export subsidies for agricultural products could still amount to a total of US$ 13.7 billion, of which $ 11.9 billion or 87 per cent by DME countries; only New Zealand has committed itself to eliminate such subsidies entirely.

3. Domestic support

25. The URAA lists practically all forms of domestic support to agricultural products and distinguishes between, on the one hand, those that are non-trade-distorting and for which, therefore, Members may claim exemption from the reduction commitments, and, on the other hand, those that have trade distortion effects or effects on production. The latter will be subject to reduction commitments, expressed in terms of a common basis, the total aggregate measurement of support (AMS).15/ The total AMS calculated for the 1986-1988 base period will be reduced by 20 per cent in equal annual instalments (between 1995 and 2000) in developed countries, and by 13 per cent over a 10-year period (1995-2004) in developing countries. However, each country will be able to use its own discretion in deciding which policies to change to achieve the overall required reduction in the total AMS: support

need not be reduced by 20 per cent for each commodity, and indeed could be increased for some commodities if sufficient efforts are made for the whole sector. This does not offer the predictability needed for sound investment decisions with regard to the future market conditions of specific commodities.

26. A wide range of non-trade-distorting programmes is allowed under the URAA.16/ In addition, the URAA provides for a number of major exemptions from AMS reductions. Thus, certain direct payments that are linked to production-limiting programmes are exempt under certain conditions. These include, in particular, United States deficiency payment programmes and the EU compensatory payments adopted under the reform of the EU's Common Agricultural Policy (CAP). Moreover, countries that have reduced support for particular commodities since 1986 will receive credit for such reductions. As a result of these exemptions and credit received, the United States and the EU will not likely need to make additional reductions in production support under the URAA.

27. The reductions by country in domestic support to agricultural producers under the URAA are presented in **table 10** of the statistical annex. According to these GATT figures, total domestic support agreed as being trade-distorting will be reduced in the OECD countries from a base level of US$ 174.1 billion to a final level of US$ 142.3 billion, or by an aggregate 18.2 per cent, i.e., by less than the 20 per cent agreed under the URAA because of credits recognized to some countries, in particular the EU, for reductions implemented earlier through its reform of the CAP. There seems little doubt that the effect of these reductions in trade-distorting domestic support will prove beneficial to developing-country exporters of the corresponding commodities, although it is very difficult to quantify the extent of such additional trade. It remains the case, however, that very substantial trade-distorting support will continue for many years to come unless action is taken to reduce it further. Moreover, many economists would argue that certain other support measures in the OECD countries, not classified under the URAA as trade distorting, do in fact have such an effect. Thus, although the URAA's disciplines on domestic support represent a very significant step forward, much remains to be done if policy-induced distortions in commodity trade are to be removed.

B. Commitments for tariff reduction on commodities classified as industrial products

28. The URAA's product coverage (see annex 1 to the URAA) includes most food commodities as well as raw hides, skins and furskins, and most raw fibres (cotton, silk, wool, flax and hemp). Its coverage excludes, however, some major agricultural or food commodities of special interest to developing countries, particularly fish and fish products, forestry products, jute and hard fibres and their products, and natural rubber. These agricultural commodities, together with minerals and metals, are treated under the URA as belonging to the industrial sector, i.e., the 36 per cent average tariff reduction and the minimum 15 per cent tariff cut per tariff item do not apply to these products. A major thrust in tariff reductions in the "industrial sector" was provided by the agreement among Canada, the EU, Japan and the United States for the mutual elimination of tariffs in nine product categories, called the zero for zero approach.17/ It should be noted, however, that these nine product groups18/ do not include the above-mentioned commodities of major export interest to developing countries. Tariff concessions on these latter commodities depended upon the decision of each importing country concerned, taking into account, inter alia, the degree of sensitivity of each sector and the policy decision to maintain preferential margins in favour of countries belonging to the same regional arrangements or of developing or associated countries.

C. Agreements affecting non-tariff barriers

29. Other agreements aim, inter alia, to introduce some discipline, transparency, predicability and equity in the field of non-tariff barriers (NTBs) and are expected to improve international competition and market access for commodities, both agricultural products and minerals and metals. It should be emphasized that the increased transparency, security and predictability offered by bound tariffs as well as by the measures aiming at reducing arbitrary use of of other trade control measures, are very likely to contribute to reducing price instability for the commodities concerned. Moreover, measures resulting in the reduction of subsidization and rationalization of supply are also likely to have some positive impact on the long-term price trends for commodities.

30. The primary aim of the **Agreement on Sanitary and Phytosanitary Measures (URASPS)** is to eliminate the arbitrary use of SPS measures by member countries to restrict trade, and gradually to bring SPS measures employed by developed and developing countries to a comparable level. The URASPS, which is binding on all members of the World Trade Organization (WTO), without the possibility to maintain bilateral exemptions, requires for the first time that SPS measures be based on scientific analysis and risk assessment, that members recognize equivalency, and that they recognize regional disease areas. This agreement will have major positive (but as yet unquantified) implications for trade in food and other agricultural products, including tropical products, where SPS measures were often arbitrarily used as a disguised barrier to entry, and were particularly effective against products originating from developing countries.

31. The **Agreement on Subsidies and Countervailing Measures** is also expected to have significant implications for international commodity trade, including in particular processed minerals and metals. It establishes a clear distinction between prohibited, actionable and non-actionable subsidies and regulates the procedures for imposing countervailing measures. In particular, it prohibits subsidies contingent either upon export performance or upon the use of domestic in preference to imported goods. The **Antidumping Agreement** provides for the strengthening of antidumping measures, improves the transparency of the required procedures and introduces a "sunset clause" which limits the duration of imposition of such measures. However, it would seem particularly important for developing countries to monitor closely the process of adoption of the requirements of the antidumping agreement in domestic law by the main users of antidumping duties. If the latter apply the positive aspects of this agreement faithfully, it could be expected to affect commodity trade, in particular in the field of metals and their semifabricates.

32. The **Agreement on Technical Barriers to Trade** will promote the use by countries of international standards and conformity assessment systems, thus reducing the scope for the use of technical regulations and standards, including packaging, marking and labelling requirements, or the procedures for assessment of conformity with technical regulations and standards, as disguised NTBs. This too could have significant positive effects on trade in commodities for which heretofore such standards inhibited trade.

33. The **Agreement on Safeguards** establishes more stringent rules for the application of safeguard measures, provided for in Article XIX of the GATT 1994. It provides in particular for precise procedures to follow for applying these measures, including the compulsory early notification of the initiation of the process which may result in such action being taken; it fixes time-limits for applying such measures;19/ and it prohibits safeguards against a product originating in a developing country Member under specified conditions.20/ The dismantling and prohibition of the use of "grey-area" measures could have a positive impact on commodity trade. However, much of the agricultural sector (those items for which tariffication has been applied) will be subject to a different safeguards regime, which provides for special safeguard actions in the form of additional duties calculated on the basis of trigger volumes or trigger prices.

34. Finally, the **Agreement on Government Procurement**, which is a plurilateral agreement because accession to it is not a condition of WTO membership, covers, for the first time, procurement at the sub-central level (e.g. by states or provinces), procurement by public entities, and construction contracts. Its aim is to ensure that foreign suppliers and foreign goods and services are given no less favourable treatment in government procurement than national suppliers and national goods and services. It covers for the first time building contracts, including sub-contracting for the procurement of metals and other materials. Thus, it offers a new opportunity for international trade in metals and other raw materials for participating Members, which are essentially developed countries.

III. QUANTITATIVE ASSESSMENT OF THE IMPACT OF THE URUGUAY ROUND AGREEMENT ON COMMODITIES

35. To supplement the above qualitative indications of the effects of the Round on commodities, this chapter draws on the quantitative studies undertaken by a number of organizations.

1. Agricultural commodities

36. **The agricultural sector** has been the subject of several studies. The FAO secretariat has recently prepared a study on the impact of the Uruguay Round on agriculture, based on models which simultaneously determine production, consumption, imports, exports and world prices for each major commodity.21/ A comparison was made between two sets of projections for the year 2000: the "baseline projections", driven by income growth, productivity changes and demographic trends, and in which prices in each country are linked to world market prices by tariffs and other policy variables and domestic forms of protection; and projections based on the results of the URA, where the reduction in tariffs changes these price linkages. The FAO study covered commodities accounting for 59 per cent of the total value of world agricultural trade, about 45 per cent of the value of agricultural exports of developing countries, and about 35 per cent of the total value of commodity exports of developing countries.22/ The main commodities not covered included vegetables, fruits, fish and fishery products, tobacco, spices, wine, honey, cut flowers, wood, cotton, jute, and hard fibres, in addition, of course, to all minerals and metals. Therefore, the review of individual commodities presented in Part two of this report is exclusively devoted to the latter group of commodities.

37. The main finding of the FAO study is that the direct impact of the URA is likely to be negligible on world agricultural production, with some reduction in the output of temperate zone products in the developed countries and a fractional rise in the developing countries. On the consumption side, the URA is projected on balance slightly to slow consumption growth in the low-income food-deficit countries. With regard to trade, the URA is modelled not to arrest the slowdown in the growth rate of world agricultural trade, despite a positive effect on the growth in trade for rice, fats and oils and bovine meat. For the developing countries, the additional export gains arise essentially from increased exports of fats and oils and oilmeal, rice, wheat and maize; they are estimated to be around US$ 1.5 billion. Overall, the impact of the URA is estimated by FAO to be rather small compared with all the other changes taking place between the base period (1987 to 1989) and the year 2000.

38. In a first attempt at evaluating the outcome of the URAA for the period 1995 to 2000, the UNCTAD secretariat has made use of a revised and up-dated version of the UNCTAD Agricultural Trade Policy Simulation Model. It should be noted that this model, developed by the UNCTAD International Trade Division, is at present being refined, and the estimates given should therefore be treated with more than the usual caution. In order to attempt to provide upper and lower boundaries on what might be expected to occur, two

scenarios have been considered: the first scenario assumes no price response on the domestic markets of the non-OECD countries, while the second assumes a price response by domestic supply and demand in these markets, with repercussions on exports and imports. The analysis has been restricted to the main commodities for which protection levels are high, essentially the same commodities covered in the FAO study, excluding tropical beverages, hides and skins, and rubber.

39. With regard to trade revenue, the UNCTAD projections conclude that the URAA would globally have no significant impact under either scenario, but would lead to significant net gains in trade revenue for some countries, offset by corresponding net losses for other countries. However, the gross amounts of these gains and losses would be much larger under the second scenario, and their country distribution significantly different. Thus, under the first scenario, developing countries would globally suffer a minor net trade revenue loss of about US$ 230 million in the year 2000 (a net gain of US$ 301 million for Latin America and the Caribbean, and losses of US$ 386 million for Africa, US$ 128 million for Asia and the Pacific, and US$ 19 million for developing Europe), but would, under the second scenario, experience globally a significant net gain of about US$ 8,920 million in their trade revenue (US$ 790 million for Africa, US$ 4,510 million for Asia and the Pacific, US$ 3,452 million for Latin America and the Caribbean, and US$ 169 million for developing Europe).**23/** Which of the two scenarios yields the most likely projection of the outcome of the implementation of the URAA depends on the real behaviour of domestic markets in developing countries and the degree of transmittal of changes in the world market prices to their domestic markets - largely a policy issue - as well as on the time required for shifting production to the most profitable activities. The faster and more fully the domestic market reacts to world market signals, the smaller the welfare losses that a developing country would suffer. Therefore, the true picture might lie somewhere between the two scenarios' outcomes.

40. In a paper presented to a World Bank Conference on the Uruguay Round and developing countries, the OECD secretariat used a computable general equilibrium (CGE) model **24/** to estimate to the year 2002 the impact of the agricultural reforms agreed on in the URAA. The model is confined to the analysis of the impact of tariffication of agriculture, and does not evaluate the long-term benefits associated with the establishment of a comprehensive rules-based trading system. In the view of the study's authors, the tariff reforms affecting commodities are modest: in the United States, "little modification" beyond wheat and wool is predicted; in the EU, changes will be only "modest"; and in Canada, there will be "few modifications".**25/** Five simulations are undertaken, differing primarily as regards the base against which tariff reductions are measured (the 1982-1993 average or the 1991-1993 average). The report does not provide trade impacts, but rather "real income" impacts by country and region modelled; those using the 1991-1993 reference period are virtually double those obtained using the 1982-1993 period. The totals are, however, much more modest than those projected before the actual results of the Round were known. Thus, under the scenario using 1982-1993 as a base, the total global increase in real income (measured in US$ of 1992) is expected in 2002 to be but US$ 25.4 billion (as compared with what the level would have been without the URA). This increases to US$ 48.0 billion when 1991-1993 is used as a base, but is still much smaller than the figure that earlier studies had forecast.

41. With regard to prices, **table 11** of the statistical annex presents a comparison of the results of the FAO, UNCTAD and 1995 OECD projections. The FAO projections conclude that the Uruguay Round will result in price increases of between 4 and 10 per cent, or about 6.6 per cent on average. The UNCTAD projections conclude that, under the first scenario, the URAA would result in price increases of about the same level as projected by FAO globally and for each of the major commodities considered. However, if these price increases are transmitted to the domestic markets of developing countries, as assumed

under the second UNCTAD scenario, the reactions of these markets would lead to much lower price increases in the world market (2.7 instead of 6.8 per cent on average). The OECD projections show very small increases, and sometimes even decreases, in international prices for the commodities studied: prices would decrease by 0.4 per cent on average under the first scenario, the most plausible one, and would increase by 3.3 per cent on average under the highest scenario.

42. The above price projections provide a rough order of magnitude of the range of changes in the food import bills of the net food importing developing countries as a result of the implementation of the URAA. Thus, for example, all other things being equal, the highest projected overall average increase of 6.8 per cent of food prices would add about US$ 235 million to the total net Sub-Saharan Africa food import bill of US$ 3,462 million per year on average in 1990-1992 (see **table 12** of the statistical annex), while, at the other extreme, the projected 0.4 per cent average price decrease would reduce this bill by US$ 14 million. These costs or benefits should not, however, be considered separately from the potential direct and indirect benefits expected to be derived from the overall positive impact on the world economy of the conclusion and implementation of the URA.

43. More details of tariff concessions made by the EU, Japan and the United States on specific agricultural commodities of export interest to developing countries may be found in part two of this study. In addition, **tables 13 to 15** of the statistical annnex provide a summary of the tariff concessions made by each of the EU, Japan and the United States, in major agricultural commodity sectors of interest to developing countries, focusing more particularly on the extent of reduction in tariff escalation. **Table 16** of the statistical annex provides more details on these tariff concessions for selected specific agricultural products or representative products of interest to developing countries. Without the benefit of a general equilibrium trade model focusing especially on the agricultural sector, it is difficult to translate the information in these tables into specific forecasts of the "evolution of prices and trade of commodities to be expected in the light of the results of the Uruguay Round". Where such projection have been done by others (principally FAO), they have been reported in the sections on individual commodities in part two. The general conclusion which may be drawn from part two is that, while a significant degree of trade liberalization has occurred for agricultural products, many products of export interest to developing countries still face high tariffs, often coupled with a relatively high level of tariff escalation.

2. Minerals and metals

44. **The minerals and metals sector** has been affected mostly, in the area of access to markets, by tariff escalation, although NTBs did play a role in some cases, particularly for unwrought and semifabricated metals. The URA will result in a significant reduction in this tariff escalation and, therefore, in improved prospects for vertical diversification in developing countries. Moreover, the increase in the proportion of bound rates will provide some security of market access. This should encourage increased investment in local processing before exports. Finally, agreements regulating NTBs should also reduce the uncertainty in the conduct of trade and improve market access and security of export outlets (See **tables 13 to 15** of the statistical annex for more details).

45. However, as highlighted in the sections on individual commodities, factors other than market access would play a predominant role in shaping world trade patterns in this sector. These factors include the availability of high-grade deposits and access to the massive financial resources needed to develop a greenfield project, scale advantages and access to technology, the proximity to the consumers in the case of semifabricates, technological change and developments relating to new materials, substitution and recycling,

and the potential growth of import requirements in newly industrialized and industrializing developing countries, particularly in Asia.

46. Because UNCTAD has been assigned the global mandate for mineral resources in the United Nations secretariat (see United Nations General Assembly resolution 49/106), and because no other organization covers this sector fully, a more detailed exposition is given in part two for these products than for agricultural commodities.

IV. FURTHER ACTION REQUIRED

A. Main gaps in the Uruguay Round and necessary additional measures at the international level

47. The above overview of the Uruguay Round, as well as the summary review of developments relating to individual commodities in part two below, show that there remain very substantial areas in international commodity trade where trade liberalization efforts need to be pursued. This is particularly the case as regards trade-distorting subsidies to domestic production and exports in the agricultural sector and as regards tariff escalation for semi-processed and processed commodities of actual or potential export interest to developing countries. The URAA has made an important start towards reducing these barriers, but much remains to be done to reduce them further and, ultimately, eliminate such policy-induced distortions.

48. There is also a need to work towards greater harmonization of national tariff schedules and towards simplicity of tariffs. In this regard, attention should be paid in future negotiations to the replacement of specific duties by *ad valorem* rates, which are more transparent and whose effect is more predictable, since not influenced by exchange rate variations. Attention should also be devoted to the abolition of very low tariffs, which create unnecessary formalities and costly bureaucratic procedures, for those who face them as well as for those beneficiaries of preferential duty-free access: the cost for the latter of meeting rules of origin requirements is often higher than any benefit derived from the preferential duty-free access offered by a 1 to 2 per cent tariff. Finally, special attention should be attached to the reduction of prohibitive tariffs as well as the improvement of the functioning of the tariff quota mechanism.

49. Other "access" issues have not been addressed under the URA, in particular the private barriers to trade stemming from, inter alia, restrictive business practices, lack of access to technology on reasonable terms for developing countries, escalation for exporting developing countries of freight rates and marketing costs with the degree of processing before export, and excessive brand advertising.

50. Trade liberalization measures do not, however, provide a solution to all the major problems confronting commodity-dependent developing countries. Additional measures are required in order to allow developing countries, particularly the least developed among them, to benefit from the market opportunities offered by the Marrakesh Agreement. Additional efforts will still be required in the following areas :

- Sustainable development focus to management of natural resources;
- Supply management and rationalization with a view to reducing excessive price fluctuations;
- Improvement in market transparency;
- Intensified research and development with a view, inter alia, to finding new end-uses and allowing developing countries to participate effectively in the revolution of biotechnology and new materials;
- Promotion of local processing in developing countries;
- Market promotion;

- Improvement in marketing systems and practices, including price risk management, with a view to reducing marketing costs and making developing countries' exports more competitive.

B. Necessary additional measures at the country and regional levels in developing countries

51. In order to benefit from liberalization measures under the URA, developing countries, in particular the least developed among them, would require increased technical assistance for the identification of new market opportunities, for the elaboration of appropriate projects in this regard, for the mobilization of the necessary financial resources, and for the market promotion of their products.

52. Increased efforts should be devoted to the promotion of regional cooperation and trade among developing countries for the constitution of wider local markets with a view to benefitting from economies of scale and establishing a strong platform for the conquest of the world market.

PART TWO: REVIEW OF INDIVIDUAL COMMODITIES

A. Agricultural commodities

53. The review below does not include the specific commodities covered by the FAO study on the "Impact of the Uruguay Round on Agriculture", namely: wheat, rice, coarse grains, fats and oils and oilmeals, meat, milk, butter, coffee, cocoa, tea, bananas, sugar, bovine hides and skins, and rubber. On some of these commodities, particularly rice, meat, sugar and coffee, in-depth studies have been undertaken by the UNCTAD secretariat and are available to the Committee as background documents.26/

1. Agricultural commodities covered by the URAA:

(a) Fruits and vegetables:

54. Fruits and vegetables represent together a major segment, and one of the most dynamic growth sectors, of world commodity trade. The total value of world exports of fresh and processed fruits and vegetables increased from US$ 5.9 billion to US$ 44.1 billion between 1970-1972 and 1990-1992. During the same period, the share of developing countries in these exports slightly declined, from 29.7 to 29.4 per cent, although the absolute value increased from US$ 1.77 billion to US$ 12.97 billion.

55. Before the Uruguay Round, the sheer complexity of tariff and non-tariff measures represented an additional trade barrier facing developing countries in this sector. Even in a single importing country, tariffs were often a combination of *ad valorem* and specific duties which varied, inter alia, according to seasons and to dates of arrival, and to the processing stage. For example, fresh fruit and vegetable imports faced tariff rates that were significantly different within intervals of a few weeks, and were the highest when they competed most with domestic produce. Fruit and vegetable imports face, both before and after the Uruguay Round, relatively high tariffs and a significant degree of tariff escalation. In addition, they were subject to a wide range of non-tariff barriers including: marketing orders, which frequently specify size, grade, quality and degree of ripeness; packaging requirements; increasingly precise and tighter labelling regulations; quotas and voluntary trade restraints; domestic price support and export subsidies; and SPS measures. Thus, for example, the EU has a general agreement on SPS requirements for horticultural trade among EU member countries, while each of them has its own SPS requirements for other trading partners, which differ by country of origin, product item and season. The United States' SPS regulations require an analysis by an independent laboratory at the cost of the exporter, often involving tests for up to 20 different plant diseases.

56. Under the Uruguay Round, there will be a significant degree of tariff reduction, although generally below the average overall tariff reduction, as well as some reduction of tariff escalation, in the three major markets reviewed. In addition, implementation of the Uruguay Round will lead to some increases in market access under minimum access opportunity commitments estimated at a total of about US$ 160 million for fruits and vegetables (see **table 7** of the statistical annex), corresponding approximately to about 0.4 per cent of world exports of this sector in the biennium 1990-1992. It will also result, world-wide, in a 35 per cent reduction in total export subsidies for fruits and vegetables, from US$ 800 to 519 million (see **table 8** of the statistical annex). Finally, the Agreement on SPS Measures under the Uruguay Round, by reducing the arbitrary use of SPS measures by member countries against imports, and by gradually bringing SPS measures applied by developed and developing countries to a comparable level, is expected to improve significantly export opportunities in this sector.

57. **Citrus fruit**: Citrus fruit is, in value terms, the most important sector among all fruits in international trade. The total annual value of world exports for this sector amounted on average in 1990-1992 to around US$ 6.29 billion (US$ 3.89 billion for fruit and US$ 2.40 billion for juices). About one-tenth of world production of fresh fruit is internationally traded as such, and a significant part in the form of citrus juices, essentially orange juice. Developing countries' share of the value of world exports of fresh citrus fruit has significantly decreased from 29 to 20 per cent between 1970-1972 and 1990-1992. During the same period, however, as a result of the massive entry of Brazil in the citrus juice market, particularly in the United States, the share of developing countries in the value of world exports of citrus juice has jumped from 26 to 56 per cent.

58. Before the Uruguay Round, the citrus fruit sector was characterised by high tariff protection and significant tariff escalation. Exports of citrus fruit generally faced very high tariffs, particularly when in season, in the EU, Japan and the United States. In the EU, in season fresh fruit faced a combination of specific and *ad valorem* tariffs equivalent to about 33 per cent of the 1992 import price for oranges, 40 per cent for mandarins and clementines, and 73 per cent for lemons and limes; only fresh grapefruit faced a low tariff of 3 per cent. In the United States, tariffs were much higher for grapefruit and lemons (11.4 and 16.1, respectively) than for oranges and mandarins (4.4 and 5.1 per cent, respectively). In Japan, base rates were 39.9 per cent for oranges, 26.6 per cent for mandarins, 18.5 per cent for grapefruit, but only 5.0 per cent for lemons (applied rates were, however, lower for the first three items). Finally, tariffs were significantly higher on orange and grapefruit juices than on fresh fruit in both Japan and the United States (respectively 29.4 and 27.4 per cent applied rates in Japan, and 31.7 and 32.6 per cent in the United States). Preferential rates under the Lomé Convention were 80 per cent lower than the MFN rates. With regard to non-tariff barriers, SPS measures generally acted as significant trade obstacles against developing country exports.

59. Under the URA, tariff concessions are generally small (around half of the average 36 per cent reduction under the Uruguay Round) and are unlikely in themselves to lead to major changes in trade patterns. The EU reduced by 20 per cent its rates on fresh fruit as well as for grapefruit juice, and by 24 per cent its rate on orange juice. The United States reduced its rates by 20 per cent for lemons, by 16 per cent for oranges and mandarins, and by 15 per cent for grapefruit and for orange and grapefruit juices. Japan eliminated its duty on lemons, reduced by 15 per cent its applied rate on mandarins as well as on orange and grapefruit juices, but it offered a rate of 24 per cent for oranges which, although lower than the base rate of 39.9 per cent, is higher than the 20 per cent it actually applied before the Uruguay Round. Thus, tariff escalation remained generally high.

60. **Other temperate zone fruit**: Other temperate zone fruits together

represent an important dynamic sector of international trade. The total value of world exports of such fruit amounted on average in 1990-1992 to about US$ 7.21 billion per year (of which US$ 2,311 million for apples, 1,611 million for grapes and 683 million for raisins, 854 million for peaches, 724 million for pears, 635 million for strawberries, 455 million for melons, 308 million for watermelons, 438 million for plums and prunes, and 117 million for apricots). To this should be added fruit juices and fruit preparations for which separate data are not generally available. World exports of apple juice alone, not counting cider, amounted annually to US$ 663 million in the period 1990-1992. The improvement of transport and marketing channels has allowed an increasing proportion of the production of these types of fruit to be traded internationally as fresh fruit (about one-tenth for apples, pears and peaches, for example). Developing countries' share of the value of world exports of such fruit had generally increased over the past two decades, from 12 to 26 per cent for grapes, from 35 to 39 per cent for raisins, from 15 to 16 per cent for apples and from 11 to 21 per cent for pears, although these countries remain net importers of the last two products.

61. Before the Uruguay Round, temperate zone fruits, particularly in season, faced generally moderate to very high tariffs in two of the three major markets reviewed. In the EU, while melons and watermelons faced a tariff of 11 per cent, strawberries a tariff of 16 per cent, apples, grapes, peaches, pears, plums and apricots faced a combination of specific and *ad valorem* tariffs equivalent to between **35 and 61 per cent** approximately. In Japan, temperate zone fruits faced tariffs of 8 to 20 per cent. In the United States, they entered duty-free (apples) or faced low tariffs, between 0.2 and 1.2 per cent. Finally, tariffs were significantly higher on fruit preparations (e.g. 35.5 per cent on fruit jams, jellies and marmalades in Japan; 25 per cent at least in the EU; and 7 to 20 per cent in the United States).

62. Under the URA, the EU generally reduced its tariffs by one-fifth and Japan by 15 to 40 per cent, while the United States reduced drastically its already very low tariffs. After these reductions, however, tariffs remain substantial in the EU (between 28 ad 49 per cent) and moderate to high in Japan (between 4.8 an 20 per cent), and tariff escalation remains generally high. These concessions are unlikely in themselves to lead to major changes in trade patterns.

63. **Tropical fruit**: Tropical fruit other than bananas, some of which may be grown also outside tropical regions, includes in particular pineapples, avocados, mangoes, passion fruit, papayas, guavas, lychees, limes, kiwi, mangosteens, durians, rambutan, jackfruit, tamarinds and starfruit. Although comprehensive and reliable statistical information is not available on these products, many indicators show that world exports of this sector have experienced rapid growth and are likely to continue to offer very dynamic prospects. It is estimated that the value of world exports of the above-listed tropical fruit, whether fresh, canned, dehydrated or dried, or in juice form, reached about US$ 2.5 billion in the period 1990-1992, of which US$ 864 million for fresh and canned pineapples alone, and US$ 614 million for kiwis. However, although countries in Africa, Asia, Latin America, Oceania, and the Mediterranean region grow one or more of this type of fruit, exports are concentrated in a small number of countries, including Costa Rica, Mexico, Philippines, Israel, New Zealand, Spain, and the United States.

64. The Uruguay Declaration launching negotiations under the Round stated that these "negotiations shall aim at the fastest liberalisation of trade in tropical products, including processed and semiprocessed forms, and shall cover both tariff and nontariff measures affecting trade in these products", and that the Contracting Parties "recognise the importance of trade in tropical products to a large number of less developed contracting parties and agree that negotiations in this area shall receive special attention, including the timing of negotiations and the implementation of the results". Tropical fruit and nuts were one of seven agricultural and tropical product

groups singled out at the 1989 GATT Midterm Review of the Uruguay Round for: (a) elimination of duties on unprocessed products; (b) elimination or substantial reduction of duties on semi-processed and processed products; and (c) elimination or reduction of all nontariff measures affecting trade in these products.

65. The final result of the Uruguay Round does not seem, however, to have fully met these expectations. Tariffs will continue to represent a significant barrier, particularly on major types of tropical fruit, and although tariff escalation will be reduced, it will remain substantial. Thus, while the existing tariffs on the unprocessed forms of most of the less traded tropical fruit were eliminated in the EU (for guavas, mangoes and mangosteens, papayas, lychees, passion fruit, starfruit, jackfruit and tamarinds), tariffs were reduced only for the most traded ones (from 9.0 to 5.8 per cent for fresh pineapples, from 11.0 to 8.8 for kiwis, from 8.0 to 4.0 - 5.1 for avocados, and from 16 to 12.8 per cent for limes). Moreover, all processed forms of all tropical fruit faced tariffs in the EU, although the level of these tariffs was significantly reduced, often by half. The rate of duty for canned pineapples was reduced from 23.1 to 19.1 per cent, and that for pineapple juice from 19.7 to 15.8 per cent. In Japan, tariffs were reduced by half for several kinds of fresh fruit (from 10 to 5 per cent for durians, rambutan, passion fruit, lychees and starfruit, from 6 to 3 per cent for avocados, guavas, mangoes and mangosteens, and from 4 to 2 per cent for papayas) but they were reduced by only 15 per cent for fresh pineapples (from 20 to 17 per cent) and by 20 per cent for kiwis (from 8 to 6.4 per cent). The rates of duty were reduced on average for canned pineapples from 62.0 to 32.6 per cent, and for pineapple juice from 38.0 to 24.4 per cent. Finally, in the United States, the 8.5 per cent tariff on kiwis will be eliminated, the tariff on papayas will be reduced from 8.5 to 5.4 per cent, while the specific tariffs on the remaining fresh tropical fruit will be reduced by 15 to 20 per cent (including pineapples, avocados, guavas, mangoes and mangosteens). The specific rates of duty were reduced by 36.4 per cent for canned pineapples, and by 20 per cent for pineapple juice.

66. **Vegetables**: This sector is one of the most dynamic sectors in international trade. The total value of world exports of this sector experienced almost a ten-fold increase between 1970-72 and 1990-92, from around US$ 2.1 billion to around US$ 19.1 billion. The highest export earners are tomatoes (US$ 3,493 million, of which US$ 2,260 million for fresh tomatoes) and potatoes (US$ 1,904 million). The global share of developing countries in these exports has, however, decreased, from close to one quarter to less than one fifth of the total value (23.4 to 19.1 per cent). This was particularly as a result of the enlargement of the EU, and to the consequent increases of vegetable exports from the EU Mediterranean members to the detriment of other Mediterranean countries. Transactions among developed countries, especially among neighbouring countries, have been accounting since 1970 for over three-fifths of this trade. Trade among the 12 members of the EU represented an increasing share of world vegetable exports, from 41 per cent in 1970 to 46 per cent in 1992. Developing countries also offer dynamic market outlets for vegetable exports. During the last two decades, the value of imports by developing countries has multiplied by ten, from US$ 251 million to US$ 2,537 million.

67. Under the URA, tariffs will be reduced on average by 27 to 30 per cent in the EU on both fresh (from 13.6 to 9.9 per cent) and processed vegetables (from 12.1 to 8.5 per cent), by 21 to 29 per cent in the United States (from 10.6 to 8.4 per cent, and from 12.2 to 8.6, respectively), and by 26 to 37 per cent in Japan (from 5.2 to 3.3 per cent, and from 13.7 to 10.1, respectively). Thus, even after the Uruguay Round, tariffs have remained relatively high on fresh vegetables in both the EU and the United States, and on processed vegetables in each of the three markets considered. The above averages conceal quite divergent situations. Thus, a closer look at specific vegetables, particularly the major ones in world trade, tomatoes and potatoes,

reveals that they face tariffs much higher than the above averages, both before and after the Uruguay Round. For example, in the EU, fresh tomatoes face a combination of *ad valorem* and specific rates equivalent to 67 per cent before the Uruguay Round and 52 per cent after the Uruguay Round, when in season, and 56 and 45 per cent, respectively, when off season, while tomato paste faces a tariff of 18 per cent, reduced to 14.4 per cent under the Uruguay Round. Fresh courgettes and globe artichokes face a similar situation. Fresh potatoes face a tariff of 21 per cent before the Uruguay Round and 13.4 per cent after the Uruguay Round, when in season, and 15 to 18 and 9.6 to 11.5 per cent, respectively, when off season. In the United States, several fresh vegetables and all frozen vegetables face a tariff above 15 per cent, reduced to 12 to 14 per cent under the Uruguay Round. In Japan, while fresh tomatoes faced a 5 per cent tariff before the Uruguay Round and 3 per cent after the Uruguay Round, tomato paste and tomato juice faced tariffs of 21.5 and 33.2 per cent, respectively, before the Uruguay Round and 15.7 and 21.3 per cent, respectively, after the Uruguay Round.

(b) Other agricultural products covered by the URAA:

68. **Wine** is a relatively dynamic sector. The total value of world exports of wine was multiplied by 7.1 times between 1970-1972 and 1990-1992, from US$ 1.2 to 8.7 billion dollars. Developing countries have almost totally disappeared from this export market, with their share in world exports shrinking from 10.9 to 2.9 per cent, and have become net importers (US$ 483 million annual imports in 1990-92). Before the Uruguay Round, wine imports faced high tariffs, in the form of specific duties or a combination of *ad valorem* and specific duties, in each of the three major import markets. Under the URA, these tariffs will be significantly reduced, by around 60 per cent in Japan, by 28 to 36 per cent in the United States, and by 20 per cent in the EU. Developing countries might seize these opportunities to attempt to regain lost trade shares in this market sector.

69. **Cut flowers** constitute another very dynamic sector in international trade. The value of world exports of cut flowers and buds has experienced a sixteen-fold increase between 1970-1972 and 1990-1992, from US$ 211 to 3,327 million. Developing countries are relatively newcomers to this market, where their share has increased from 2.9 to 21.7 per cent between 1970-1972 and 1990-1992. The Netherlands alone has been accounting since 1970 for around two-thirds of world exports, followed by Colombia which, with its 10 per cent share in 1990-1992 accounted for about half of developing countries total exports in this sector. On the import side, Western Europe accounted for around 95 per cent of world imports in 1970-1972 and for four-fifths in 1990-1992, followed by the United States, where imports rose from only US$ 2 million in 1970 to US$ 401 million in 1992, representing about 12 per cent of world imports in 1992.

70. Under the Uruguay Round, tariffs on fresh cut flowers will be reduced by 50 per cent in the EU, that is from 24 per cent in summer and 17 per cent in winter to 12 and 8.5 per cent, respectively, and by 18 per cent on average in the United States, that is from 8 to 6.5 per cent. In Japan, cut flowers entered duty free before the Uruguay Round. It should be noted, however, that cut flowers entered duty-free for countries enjoying special preferences in both the EU and the United States, in particular in the United States under the Andean Trade Preference Act, and in the EU under the Lomé Convention for ACP countries. The EU also extended duty-free access to cut flowers from Latin American countries. The above-mentioned tariff reductions in the principal world markets are expected to give some impetus to world exports, in particular from developing countries not enjoying special preferences.

71. **Tobacco**: Tobacco leaf and tobacco products constitute a relatively dynamic sector in world commodity trade. The total value of world exports from this sector was multiplied by 8.3 times between 1970-1972 and 1990-1992 (from US$ 1.44 to 5.55 billion for tobacco leaf, and from US$ 0.9 to 14.0 billion

for tobacco products). During the same period, developing countries' share in tobacco leaf exports increased from 36 to 48 per cent, from US$ 0.52 to 2.67 billion, but they continue to be minor exporters of tobacco products.

72. Before the Uruguay Round, tobacco and tobacco products faced very high tariffs in the EU and the United States and a high degree of tariff escalation in the three major markets reviewed. In the EU, where unmanufactured tobacco faced *ad valorem* duties with specified minima and maxima in terms of a specific duty, these duties will be reduced on average under the Uruguay Round from 17.6 to 14.1 per cent, while average tariffs on manufactured tobacco will be reduced from 69.5 to 37.6 per cent, including halving tariffs on cigars from 52 to 26 per cent, and a 36 per cent reduction of tariffs on pipe tobacco from 117 to 74.9 per cent. The United States will, on average, reduce its specific duties on unmanufactured tobacco by around 42 per cent on average, and its specific duties on manufactured tobacco by 51 per cent on average. Finally, Japan will reduce its tariffs on manufactured tobacco by 15 to 20 per cent.

(c) Agricultural raw materials (covered by the URAA only in raw form):

73. **Cotton**: The total value of world exports of cotton and cotton yarn has been multiplied by 3.8 between 1970-1972 and 1990-1992 (from US$ 3.60 to 13.56 billion). The share of developing countries in these exports has only slightly increased for yarn, but significantly decreased from 63 to 38 per cent for unprocessed cotton, of which developing countries as a group have become net importers. This reflects the growth of local processing before exports in major cotton producing countries as well as imports of raw cotton for processing in newly industrialised developing countries. A significant development has been the substantial increase in the self-sufficiency in raw cotton of the EU following its enlargement to South European countries and the consequent inclusion of cotton in the Common Agricultural Policy.

74. The URA is expected to have probably a negligible impact on raw cotton, while it could have tangible implications for production and trade in textiles and clothing. The expected increase in consumer income as a result of the Uruguay Round and the consequent increase in fibre consumption and production is likely to be the Agreement's most important implication for the raw cotton sector. As world cotton trade has been relatively free, the URAA is not likely to lead to considerable changes in market access conditions. Its impact on cotton is limited also because it does not affect domestic income support programmes in either the EU or the United States, and because the definition used for export subsidies in the URAA does not include those applied in the cotton sector. Raw cotton production and prices will, therefore, presumably not be significantly affected by the implementation of the URAA. Developments relating to production and consumption in China are expected to continue to have by far the largest influence on raw cotton trade and prices. The liberalization of trade in textiles and apparel will have a significant impact on the cotton industry, as experience suggests that a liberalization of trade in textiles and clothing leads to a shift in production towards low-cost textile and clothing producers, many of which also produce cotton.**26/**

2. Agricultural commodities not covered by the URAA:

75. **Fish and fishery products**, including crustaceans, constitute also one of the most dynamic sectors in world commodity trade. The total value of world exports from this sector was multiplied by 10.6 times between 1970-1972 and 1990-1992, from US$ 3.5 to 37.2 billion, while developing countries share in these exports increased from 31 to 41 per cent, from US$ 1.1 to 15.2 billion.

76. Before the Uruguay Round, fish and fish products faced relatively high tariffs and a significant degree of tariff escalation in the three major markets reviewed, although they were generally the highest in the EU and the lowest in the United States. Under the Uruguay Round, these tariffs will be

reduced, but generally below the average reduction for industrial products (fish and fishery products are not covered under the URAA), or even kept unchanged in some cases. In the EU, tariffs will be reduced on average by 16 per cent for fresh fish (from 13.8 to 11.6 per cent), and by 11 per cent for frozen and prepared or preserved fish (from 14.5 and 20.1 per cent, respectively, to 12.9 and 17.9 per cent), but will remain unchanged at 13.3 per cent on average for salted, dried or smoked fish. In Japan, tariffs will be reduced on average by 29 per cent for fresh fish (from 5.6 to 4.0 per cent), by 20 per cent for frozen fish (from 5.5 to 4.4 per cent), by 23 per cent for salted, dried or smoked fish (from 12.7 to 9.8 per cent), and by 36 per cent for prepared or preserved fish (from 13.2 to 8.5 per cent). Finally, in the United States, where tariffs on fish and fishery products are generally below 2 per cent, except for prepared or preserved fish (6.5 per cent on average), all these tariffs with a few exceptions will be reduced on average by 25 to 35 per cent.

77. **Jute and products**: This sector of international trade has been practically stagnant, with a total value of world exports slightly increasing from US$ 784 to 802 million between 1970-1972 and 1990-1992. Jute, like hard fibres, is exclusively cultivated in developing countries. Its consumption has been decreasing in developed countries and increasing in developing countries, which now account for close to two-thirds of world jute consumption and about one-third of imports. Before the Uruguay Round, while raw jute entered duty-free in the major four markets reviewed (Australia, EU, Japan, and the United States), jute products faced a significant degree of tariff escalation, although developing countries exports generally benefited from preferential treatment under the GSP schemes of these four markets or under the Lomé Convention. Under the Uruguay Round, the United States eliminated all of its remaining tariffs in this sector (on average 3.5 per cent on jute yarn and 0.5 per cent on jute fabrics), thus also eliminating tariff escalation; the EU eliminated its 5.3 per cent tariff on jute yarn and more than halved its tariff on jute fabrics (on average from 8.8 to 4.0 per cent) and new sacks (from 8.6 to 4.0 per cent); Japan eliminated its 10 per cent tariff on jute yarn as well as its 20 per cent tariff on jute sacks, and halved its 20 per cent tariff on jute fabrics; and Australia halved its remaining 20 per cent tariff on jute yarn (jute sacks and fabrics already enjoyed free access before the Uruguay Round). The main problem of this sector is, however, the competition from synthetic fibres, which is facilitated to some extent by the persistent relative instability of supply and prices for jute, as well as by the fact that jute products and competing products made of synthetic fibres often face the same tariff in importing countries, including in major importing developing countries, both before and after the Uruguay Round.25/

78. **Hard fibres and manufactures**: The situation of this sector is practically similar, in every respect, to that outlined above for the jute sector. International trade of all hard fibres and their manufactures (including sisal and henequen, coir, and abaca) has also been practically stagnant, with a total value of world exports increasing from US$ 230 to 373 million over the last two decades. Before the Uruguay Round, while raw hard fibres entered duty-free into the major four markets reviewed (Australia, EU, Japan, and the United States), hard fibres manufactures faced a significant degree of tariff escalation, although developing countries exports generally benefited from preferential treatment under the GSP schemes of these four markets or under the Lomé Convention. Under the Uruguay Round, the United States eliminated its 4.0 per cent tariff on processed sisal and henequen and reduced from 3.5 to 1.9 per cent, on average, its duties on binder or baler twine of hard fibres; the EU maintained its 3.8 per cent tariff on processed sisal and henequen and reduced from 14.8 to 8.6 per cent on average its duties on binder or baler twine of hard fibres; Japan reduced from 12 to 7.9 per cent its tariff on processed sisal and henequen and from 6.1 to 2.0 per cent on average its duties on binder or baler twine of hard fibres. The main problem facing this sector is competition from synthetic fibres. In the case of baling twine - the traditional end-use of sisal and henequen -competition from

polypropylene twine has been quite severe, particularly in the EU where the natural fibres have lost two-thirds of their market share in this area, against only 30 per cent lost in the United States. A case can be made for total elimination of the remaining tariffs on jute and hard fibres and their manufactures not only for environmental considerations, but also for poverty alleviation in view of the fact that these fibres are exclusively cultivated in developing countries, and mostly in the least developed countries.**26/**

79. **Tropical timber**: Tropical timber, with average annual exports valued at US$ 16.7 billion in 1990-92 (including veneers and plywood), represents a small part of the forestry products sector, with corresponding exports valued at around US$ 100 billion. Tropical timber has been a relatively dynamic sector and one of the few exceptions to the long-term downward trend in prices in real terms. It faced a significant degree of tariff escalation, in particular between wood in the rough, which entered duty-free or faced very low tariffs in the three markets reviewed, and wood based panels. The URA resulted in a significant reduction in tariff escalation, but it is noteworthy that 17 per cent of imports from developing countries is still subject to tariffs of between 5.1 and 15.0 per cent after the Uruguay Round.

80. Trade-related environmental measures (TREMs) may play an increasing role in this trade. Consideration of the role of TREMs for wood and wood products is complicated by scientific uncertainty about the effects of logging on forest regeneration, differences in values held by groups and Governments and their perceptions of actual situations, difficult problems of measurement and monitoring of the state of forests, and legal aspects of sovereignty over the use of a country's own forests. An approach to resolve problems between countries is the conclusion of multilateral environmental agreements with trade-related provisions that enjoy the full support of participating exporting and importing countries. In the meantime, particular attention should be devoted to monitoring TREMs contemplated or imposed by importing countries and considering appropriate action by affected developing countries to address these situations.**26/**

B. Minerals and metals

81. **Iron ore and steel**: All minerals and metals up to the unwrought metal stage are included in the traditional definition of the commodity sector, with one exception relating to iron ore and steel: iron ore only is included in the commodity group while steel is considered to be an industrial product. In 1990-1992, world exports amounted annually to US$ 8.4 billion for iron ore and US$ 106.2 billion for steel. World steel consumption has remained practically constant during the last two decades, at around 700 to 730 million metric tons per year, i.e., 90 per cent of all metals by weight, and over 28 times greater than for aluminium, the second most consumed metal. Around 46 per cent of world iron ore production and around 28 per cent of world steel production are internationally traded. It should be emphasised, however, that iron ore constitutes only a little less than two-thirds of the iron-bearing materials for steelmaking. In world crude steel production, ferrous scrap has been accounting for a stable share, 35 per cent over the last two decades.

82. Between 1970-72 and 1990-92, developing countries increased their share of world exports for both iron ore (from 38.6 to 45.2 per cent) and steel (from 3.2 to 16.2 per cent). Despite the five-fold increase in their export share of the latter, however, developing countries continue to account for only a small proportion of world exports of steel and steel semifabricates (16.2 per cent), where they remain largely net importers, accounting for around 30 per cent of world imports in 1990-1992.

83. Before the Uruguay Round, iron ore (ores and concentrates, including agglomerated ores: sinter, pellets and briquettes) faced no tariff or NTBs in the three major markets reviewed (EU, Japan, United States). There was a certain degree of nominal tariff escalation in that more processed iron, in

the form of direct-reduced iron (DRI), and pig iron (where only a minor fraction, 2 per cent, of production is internationally traded) faced low tariffs (2.5 - 3.7 per cent) in the EU and Japan, but entered duty free into the United States.

84. The steel sector has been characterized by a significant degree of tariff escalation. In the three major markets reviewed, tariff rates significantly increased from 2.5 to 4.3 per cent for steel ingots, 4.4 to 4.9 per cent for long products (sections, rods, wire and bright bars), 4.4 to 6.5 per cent for flat products (plates, sheets and coils), and 6.0 to 10.0 per cent for tubes and pipes. This tariff escalation was not, by far, the major obstacle. Indeed, while disputes about unfair trade practices have always dominated world steel trade, protectionist measures have strongly intensified since the late 1970s as a consequence of structural oversupply of steel and steel products resulting from the rapid growth of capacities in the 1970s and the emergence of developing country suppliers, on the one hand, and the sharp contraction of steel demand, particularly in developed countries, owing in particular to the slowdown of the world economy in the 1980s, declining intensity of use, and substitution, on the other hand. NTMs became widespread. "Voluntary Export Restraint Agreements" or "Voluntary import quotas", subsidies and countervailing measures, pricing controls and anti-dumping measures, and other less visible measures, have hindered international trade in primary iron and in steel and steel products, and seriously affected the potential of developing countries, in particular the newly industrialised countries, to gain increased shares of the world market. The fact that, even in DME countries, about one-third of the steel companies were State-owned until the late 1980s, added to the politicization of the issue.

85. Under the GATT framework, since 1990, intensive negotiations have been taking place with a view to concluding a Multilateral Steel Agreement on Trade Liberalization (MSA). About 35 countries have participated in the negotiating group on the MSA. They included a number of developing countries. However, major actors in world steel trade have not been involved, namely China, Russian Federation and Ukraine, in particular. Initially, the idea was to replace by a global agreement the bilateral "voluntary export restraints", upon their expiration. The aim was to provide world-wide acceptable rules for the elimination of tariffs and NTBs, to reduce or eliminate the subsidies to the steel industry and to address other practices distorting world steel trade. No consensus on a draft text could be reached. However, on the signature of the Uruguay Round Agreement at Marrakesh in April 1994, a number of industrialized countries offered tariff reductions in the steel sector beyond the initial objective of one-third tariff cuts.

86. Under the zero-for-zero plan negotiated under the Uruguay Round, the major steel importing and exporting countries agreed to eliminate all tariffs on DRI, pig iron, and steel and steel semifabricates in ten equal instalments over a ten-year period. Thus, the EU and Japan agreed to eliminate their duties on DRI, pig iron and steel ingots, and the United States to eliminate its tariff duty on steel ingots. Tariffs on steel semifabricates will be also totally eliminated by 2005.

87. The above tariff concessions under the URA for processed iron ore and steel are unlikely in themselves to lead to major changes in trade patterns. It should be recalled, in this connection, that for iron ore, the availability of high-grade deposits together with the massive financial resources needed for a greenfield project, are, of course, the determinant factor for entry. For steel and steel semifabricates, the predominant factors are the non-tariff measures (NTMs), particularly since the revolution of the mini-mills has considerably reduced the minimum size of investment required for steelmaking. Major changes in trade patterns in favour of developing countries could result from the conclusion of the MSA and the progressive elimination of the widely prevailing NTMs. Major changes of trade patterns are also expected to result from other factors than those relating to trade liberalization in steel. In

particular, the expansion of steel demand in developing countries, inluding China, is likely to be the main engine of growth of international trade in iron ore and steel.26/

88. **Bauxite/alumina/aluminium**: This sector is in quantity and value terms the second most important in international metal trade after the iron ore/steel sector. The total annual value of world exports for this sector amounted on average in 1990-1992 to around US$ 34.4 billion (0.9 billion for bauxite, 4.9 billion for alumina, 14.2 billion for unwrought aluminium, and 14.4 billion for aluminium semifabricates and manufactures. It is also the most dynamic among the base metals. Indeed, world consumption of aluminium has almost doubled, from 13.0 to 25.5 million tons between 1970-1972 and 1990-1992 (of which primary aluminium accounts for about 75 per cent). A large proportion of world production is internationally traded: about 30 per cent for bauxite, about 50 per cent for both alumina and unwrought aluminium in the period 1990-1992. For unwrought aluminium, this represents a major change from the period 1970-1972 when only 27 per cent of world production was exported.

89. Developing countries continue to account for the bulk of world exports of bauxite (over four-fifths), although bauxite is increasingly processed before exports: 30 per cent of world bauxite production was exported in 1990-1992, against 47 per cent two decades earlier. Between 1970-1972 and 1990-1992, their share of alumina exports had decreased (from 44 to 27 per cent), reflecting higher processing before exports, while their share of aluminium exports had significantly increased, from 7 per cent to almost 24 per cent. However, developing countries continue to account for only a minor share of world exports of aluminium semifabricates (7.9 per cent), where they remain largely net importers, accounting for about 15 per cent of world imports in 1991-1992.

90. Before the Uruguay Round, the bauxite/alumina/aluminium sector was characterised by a significant degree of tariff escalation and recent introduction of non-tariff barriers. Alumina entered duty free in all countries, with the exception of India (45 per cent) which is self-sufficient, and Venezuela (5 per cent). Most alumina-importing countries did not levy any tariffs on alumina, except the EU with a 5.5 per cent tariff (0 under the GSP and the Lomé Convention), Argentina (5 per cent), China (20 per cent), Poland (10 per cent) and Russia (5 per cent). Tariffs on unwrought aluminium in major markets and in countries importing significant or small quantities were generally low (below 3 per cent), although significant in Argentina (7.5 per cent), Austria (8 per cent), China (9 per cent), the EU (6 per cent), Hungary, India (60 per cent), Mexico (10 per cent), Republic of Korea (5 per cent), Russian Federation (5 per cent), Switzerland (4.4 to 6.6 per cent), Thailand and Venezuela. The EU excludes aluminium from its GSP, but offers duty-free entry for ACP countries (three ACP countries had significant exports of aluminium: Cameroon, Ghana, and Suriname). Thus, under the GSP, the escalation from alumina to aluminium has been significant in the EU (6 per cent). Tariffs on semifabricates were significant in most countries, while GSP rates were generally either zero or half of MFN rates. With regard to non-tariff barriers, the only significant instances in recent years when NTMs have been applied were the anti-dumping and countervailing duties imposed from June 1988 in the United States on certain semi-manufactured products from Venezuela, and the imposition by the EU of an import quota of 15,000 tons per month on unwrought aluminium from the CIS countries from August 1993 to February 1994, replaced by an undertaking in January 1994 by the Russian Federation to reduce its output of primary aluminium by 500,000 tons annually.

91. Under the URA, tariff concessions have generally been small and unlikely in themselves to lead to major changes in trade patterns. The EU reduced by up to 25 per cent its rates on part of alumina, and on aluminium powders, bars, rods, profiles, wire, plate, sheet or strip and on part of aluminium foil. It did not reduce its 6 per cent rate on unwrought aluminium. Japan eliminated its 1 per cent duty on unwrought aluminium, its 3.9 per cent duty

on part of alumina, and its 4.6 per cent duty on aluminium powders; and it reduced by about one quarter its rates on most other aluminium products in line with the EU. The United States did not reduce its rates, which were, to a significant degree, generally lower than the reduced rates of the EU and Japan. Negotiations are, however, continuing between the United States and the EU with the stated objective of the United States to eliminate EU duties on unwrought aluminium. Of other countries with significant trade in the products concerned, the following made no offers on aluminium or made offers with bound rates higher than the unbound rates they had already applied: Argentina, Brazil, China, Hong Kong, Indonesia, Malaysia, New Zealand, Philippines, Republic of Korea (lowered rates on some tariff lines, however), Singapore and Venezuela. Erosion of preference is relatively unimportant, given the small concessions made. It should be noted in this connection, however, that for aluminium the scale advantages and access to technology are probably a more important barrier to entry than tariffs.

92. Major changes in trade patterns are likely to result from other factors than the Uruguay Round Agreement, in particular the expansion of aluminium demand in South and East Asia. World consumption of aluminium is projected to increase by 6.3 million tons from 1993 to 2000, of which 3 million tons in developing Asian countries. Known planned capacity additions in Asia (in the Gulf countries and India) as well as likely capacity expansions (in China), correspond to about 1.1 million. As a result, imports of aluminium by the region could increase from 1.7 million tons in 1993 to 3.5 million tons in the year 2000, or from 17 to over 30 per cent of world imports. These projected developments give rise to important export opportunities for developing countries outside the region, in particular those countries which are already exporting unwrought aluminium and might be in a position to establish or expand downstream processing facilities. While the reduction in tariffs and tariff escalation in the Uruguay Round has generally been small, it could offer some incentive to these countries to invest in this perspective. A commitment to negotiate further for a significant reduction of tariff escalation would be required in order to offer increased security of market access world-wide and to encourage the scale of investments necessary to avoid a shortage of aluminium similar to the one that occurred in 1988.**26/**

93. **Copper**: This sector is in quantity and value terms the third most important in international metal trade. The total annual value of world exports for this sector amounted on average in 1990-92 to around US$ 25.3 billion (US$ 4.1 billion for ores and concentrates, 1.2 billion for unrefined metal, 9.5 billion for unwrought refined copper, and 10.5 billion for copper semifabricates and manufactures). It is also a relatively dynamic sector among the base metals. Although world copper consumption had been negatively affected between the early 1970s and the mid-1980s by the slowdown of the world economy, declining intensity of use, miniaturization and substitution by other materials (namely aluminium and plastics), it had grown from 7.5 to 10.8 million tons between 1970-1972 and 1990-1992 (of which primary copper accounted for about 85 per cent). This dynamism is largely owing to the fast growth of copper consumption in developing countries, particularly in developing Asia (including China). The share of developing countries in world copper consumption had increased from 9 per cent in the early 1970s to about 25 per cent in the early 1990s. Over one third of world refined copper production is internationally traded (around 34 per cent in 1970-1972 and 37 per cent in 1990-1992).

94. Developing countries continue to account for a little over half of world exports of copper: around 52 per cent in 1990-1992 for copper ores and concentrates as well as for refined copper. An increasing proportion of copper ores and concentrates has been entering international trade: about one quarter in 1990-1992 against about one tenth in 1970-1972. This has been attributed to two factors: on the one hand, large importing countries, particularly Japan and Germany, had built metallurgical industries based on imports of concentrates; on the other hand, depletion or closure of mines in several

countries has left their smelting capacities without local supply of concentrates. This trend is expected to persist in the coming years. With regard to copper semifabricates, the size of domestic markets of developing countries does not generally allow economies of scale for the establishment of national copper semifabricating industries. Developing countries continue, therefore, to be net importers of these products.

95. Before the Uruguay Round, the copper sector was characterized by a significant degree of tariff escalation. Copper ores and concentrates entered duty free in the three major markets reviewed. They also entered duty free or faced a very low tariff rate (generally 1 per cent) in all other countries, with the exception of some developing countries with domestic copper mines, in particular India (45 per cent tariff and 90 per cent total charges), Mexico and the Philippines (10 per cent tariff in both). Unrefined and refined copper entered duty free in the EU, where the copper semifabricating industry depends considerably more on imports of unwrought copper than that of other developed regions. Imports faced a specific duty corresponding on average to about 5.5 per cent duty in Japan, 1 per cent duty in the United States, 5.5 and 6 per cent, respectively, in China, 2.7 and 9 per cent, respectively, in the Republic of Korea, 10 per cent in Mexico and the Philippines, and 65 per cent in India. Under the GSP schemes of both Japan and the United States, however, unrefined and refined copper entered duty free, but within low quantity ceilings in Japan (not always enforced in practice) or with some exceptions in the United States (Chilean exports were excluded and a reduced competitive need limit applied to Mexico). Finally, tariffs on copper semifabricates were significantly higher in most countries, implying even higher rates of effective protection. The EU applied tariffs of between 6 and 6.5 per cent on most copper semifabricates but offered duty free entry to EFTA countries - which supplied over half of its imports of these products - as well to the beneficiaries of its GSP scheme, although ceilings were applied to the latter group. ACP countries have also enjoyed duty free treatment, but they are not exporters of these products. The United States imposed duties ranging between 1.7 and 3.9 per cent, and offered duty free treatment under its GSP scheme with, however, no significant impact on trade flows. Japan applied the same tariff on copper semis as on unwrought copper. Switzerland, the third largest importer of copper semis among DME countries, behind the EU and the United States, applied specific duties corresponding to a range of 2 to 13.7 per cent *ad valorem*. However, imports under its GSP scheme enjoyed duty free treatment, but virtually all its supplies of copper semis came from EU and EFTA countries, which also enjoyed duty free treatment. The case of Austria was similar to Switzerland. With regard to NTBs, the only instances in recent years of NTMs having been applied were the antidumping and countervailing duties imposed by the United States on imports of some semifabricates from Brazil, Canada, France, Republic of Korea, New Zealand and South Africa.

96. Under the URA, tariff concessions are generally small and are unlikely in themselves to lead to major changes in trade patterns. Japan lowered its 5.5 per cent average duty on unrefined and refined copper and copper semifabricates to 3 per cent. The EU has generally lowered by 20 per cent (from an average 6.2 per cent to an average 4.9 per cent) its tariffs on copper semifabricates. The United States has eliminated its 1 per cent duty on unrefined copper, but not its 1 per cent duty on refined metal, and lowered its tariffs on semifabricates from 3.3 to 2.3 per cent. Of other countries with significant trade in copper and copper semifabricates, Switzerland has pledged to reduce its tariffs on semis by an average 40 per cent. Developing countries have not generally committed themselves to reducing import duties on copper and copper products (Brazil, China, Hong Kong, India, Malaysia, Mexico, Philippines, Republic of Korea, Singapore, Taiwan Province of China, and Thailand). Either they have not included copper in their schedules, or they have bound their duties at the same level or at a higher level than the unbound rates they actually applied, with a few exceptions. Erosion of preference is relatively unimportant, given the small concessions made.

97. The most tangible results of the Uruguay Round in terms of cuts in tariffs affecting copper trade will be at the semifabricating stage in DME countries. However, given the essentially regional pattern of trade in semis, regional agreements are likely to have a stronger impact than the tariff reductions. The main agreements with an effective or potential impact on trade in copper semifabricates are those between the EU and its neighbouring countries (Central and Eastern Europe and Turkey), North American Free Trade Agreement (NAFTA) and its possible extension southwards, and Asia-Pacific Economic Cooperation (APEC).

98. International trade in copper and copper products is, indeed, determined by the main economic and technical characteristics of the world copper industry (particularly scale advantages, availability of raw materials, access to technology, and proximity of markets), while trade barriers play only a marginal role. For developing countries, the obstacles are rather on the supply side. Thus, despite tariff escalation, those developing countries in which industrial growth has warranted the establishment of a sizeable semifabricating industry have succeeded in exporting limited amounts of semis to developed and other developing countries. Therefore, the implementation of the Uruguay Round in itself is expected to have only a very limited impact on copper prices and trade. Major changes in trade patterns are likely to result from factors other than the Uruguay Round Agreement, in particular the expansion of copper demand in South and East Asia, and to a lesser extent in Latin America.**26/**

99. **Nickel**: The total annual value of world exports of nickel amounted on average in 1990-1992 to around US$ 6.1 billion (US$ 0.2 billion for ores and concentrates, 1.2 billion for intermediate products, 3.7 billion for unwrought metal, and 1.0 billion for semi-manufactures), a little over a three-fold increase from 1970-1972, compared to almost a ten-fold increase for the bauxite/aluminium sector during the same period. Four-fifth of primary nickel output is used in the production of alloys with other metals, particularly for the production of stainless steel. The share of developing countries in world nickel consumption has increased from less than 2 per cent in the early 1970s to a little over 10 per cent in the early 1990s, mostly owing to increased consumption in newly industrialized countries of Asia. China accounts for another 5 per cent of world nickel consumption. Close to three-quarters of world nickel metal production was internationally traded in 1990-1992, against some two-thirds in 1970-1972. Developing countries have increased their share of world exports in this sector from 21 per cent in 1970-1972 to 26 per cent in 1990-1992 (from US$ 384 to 1,567 million). Their share in world exports of nickel semifabricates continues, however, to be almost negligible (around 2 per cent).

100. Before the Uruguay Round, nickel ores and concentrates, intermediate products and unwrought metal entered duty free into the EU and the United States, but faced a significant degree of tariff escalation in Japan. Under the Uruguay Round, Japan reduced these tariffs from 2.9 to 1 per cent for nickel mattes and from 10.1 to 6.8 per cent for unwrought metal. Nickel semi-fabricates, which account for a low share of nickel consumption, faced a tariff of generally between 3.9 and 4.6 per cent on average in the three major markets reviewed. Under the Uruguay Round, the latter tariffs have been reduced, on average, from 4.6 to 1.3 per cent in the EU, from 3.9 to 2.2 per cent in Japan, and from 4.0 to 2.5 per cent in the United States. These tariff concessions may encourage further local processing before exports from developing countries, but are unlikely in themselves to lead to major changes in trade patterns.**26/**

101. **Zinc**: Partly because zinc represents an exception, in that zinc prices have been following an upward trend in real terms since 1960, and partly as a result of the increase in the volume of world exports, the total annual value of world exports in the zinc sector amounted, on average, in 1990-1992 to around US$ 5.7 billion (US$ 2.2 billion for ores and concentrates, 3.1

billion for unwrought metal, and 0.4 billion for semi-manufactures), an almost six-fold increase from 1970-1972. Around one-third of zinc metal production was internationally traded in 1990-1992. Developing countries' share of world zinc exports has remained at about the same level during the past two decades, around 18 to 19 per cent. Despite the fact that developing countries are significant net exporters of zinc ores and concentrates, they are globally net importers of zinc, owing to increased imports by the newly industrialized countries of Asia, which had accounted for close to one-quarter of world imports of zinc metal in 1990-92.

102. Before the Uruguay Round, the zinc sector was characterized by a significant degree of tariff escalation. Zinc ores and concentrates entered duty free into the EU and Japan, while in the United States they faced a specific duty equivalent to a 1.2 per cent tariff which will be eliminated under the Uruguay Round. In the EU, unwrought metal and zinc semifabricates faced tariffs of 3.5 and 8 per cent, respectively, which will be reduced under the Uruguay Round to 2.5 and 5.0 per cent, respectively. In Japan, unwrought metal faced a specific duty equivalent to a 4.5 per cent *ad valorem* tariff, which will be reduced to an equivalent of 2.4 per cent under the Uruguay Round, while zinc semifabricates faced on average a tariff of 5.6 per cent, reduced to 3 per cent under the Uruguay Round. In the United States, unwrought zinc, except casting grade zinc, faced a tariff of 1.5 per cent, unchanged under the Uruguay Round, while casting grade zinc and zinc alloys both faced a 19 per cent duty, reduced to 3 per cent under the Uruguay Round; likewise tariffs on zinc bars, rods, profiles and wire will remain unchanged at 4.2 per cent, while the average tariffs on other semifabricates will be reduced from 4.0 to 2.9 per cent. These tariff concessions will presumably encourage further local processing before exports from developing countries, but are unlikely in themselves to lead to major changes in trade patterns. **26/**

103. **Lead**: The growth of world consumption and trade of lead has been affected by environmental legislation in major consuming countries. The total annual value of world exports in the lead sector amounted, on average, in 1990-1992 to around US$ 1.6 billion (US$ 0.43 billion for ores and concentrates, 1.02 billion for unwrought metal, and 0.14 billion for semi-manufactures), less than a three-fold increase in nominal terms from 1970-1972. Around one-half of lead metal production was internationally traded in 1990-1992. Developing countries' share of world lead exports had decreased from 28.1 to 22.7 per cent during the past two decades. Like zinc, despite the fact that developing countries are net exporters of lead ores and concentrates, globally they are net importers of lead, owing to increased imports by the newly industrialized countries of Asia, which had accounted for over one-quarter of world imports of lead metal in 1990-1992.

104. Before the Uruguay Round, the lead sector was also characterized by a significant degree of tariff escalation in the EU and Japan. Lead ores and concentrates entered duty free into these two markets, while unwrought metal and semifabricates faced moderate to relatively high tariffs. Thus, unwrought lead faced on average a 2.8 per cent tariff in the EU, reduced to 2.0 per cent under the Uruguay Round, while lead semifabricates faced on average a tariff of 7 per cent, reduced to an average 4.0 per cent under the Uruguay Round. In Japan, unwrought lead faced a combination of specific and *ad valorem* tariffs, equivalent to an average tariff of about 6.5 per cent, reduced to an average 1.9 per cent under the Uruguay Round, while lead semifabricates faced on average a tariff of 6.8 per cent, reduced across-the-board to 3.0 per cent under the Uruguay Round. In the United States, lead ores and concentrates faced a specific duty equivalent to a 2.9 per cent tariff which will be reduced to an equivalent of 1.9 per cent under the Uruguay Round. Unwrought metal faced a 4.0 per cent duty, reduced to 2.5 per cent under the Uruguay Round, while lead semifabricates faced similar tariffs, of an average level of 4.0 per cent (and even lower at 2.5 per cent if powders and flakes are excluded), reduced to an average 1.7 per cent under the Uruguay Round. Developments relating to consumption in newly industrialized countries as well

as those deriving from environmental legislation will presumably have a much higher impact on the market than the above tariff concessions.

105. **Tin**: The tin sector is the less dynamic among the base metals. World tin consumption was practically stagnant between 1970-1972 and 1990-1992, at around 200 to 220 thousand tons per year. It has been declining in DME countries, where it was particularly hit by the economic slowdown, declining intensity of use, miniaturization and, above all, substitution by other materials (namely aluminium and plastics), particularly in food packaging and beverage cans. This decline was, however, offset by growth in developing countries, where most of its potential still lies, particularly in developing Asia (including China), and, to a lesser extent, in Latin America. The share of developing countries in world tin consumption has increased from 8 per cent in the early 1970s to about 18 per cent in the early 1990s. Close to 90 per cent of world primary tin metal copper production is internationally traded (around 77 per cent in 1970-1972 and over 87 per cent in 1990-1992). The total annual value of world exports for this sector amounted on average in 1990-1992 to US$ 1.5 billion (US$ 0.2 billion for ores and concentrates, 1.1 billion for metal, and 0.2 billion for semifabricates and manufactures). Developing countries account for over four-fifths of world tin metal exports. Practically all world exports of tin ores and concentrates are imported for processing in developing countries.

106. Before the Uruguay Round, the tin sector was characterized by a significant degree of tariff escalation. Tin ores and concentrates entered duty free in the three major markets reviewed. Unwrought unalloyed tin metal entered duty free into the EU, Japan and the United States, but tin alloys faced a 3.2 per cent tariff in Japan. Finally, tin semifabricates faced significant tariffs in the three major markets reviewed: between 2.5 and 5.3 per cent in the EU, between 3.0 and 4.6 per cent in Japan (except foil, which entered duty-free), and between 2.4 and 7.0 per cent in the United States (4.2 per cent on average, except tubes and pipes, which faced no duty).

107. Under the Uruguay Round Agreement, tariff concessions have been significant. The EU eliminated all its duties on tin semifabricates, thus making tin the only fully liberalized base metal sector, without tariff escalation, in any of the three major markets reviewed. Japan lowered by one-third its import duties on tin alloys, and its tariffs on semifabricates from an average 3.6 per cent to an average of 2.7 per cent. The United States lowered its tariffs on semifabricates on average from 4.2 to 2.7 per cent. The significant reduction of tariff escalation on tin semis, and its complete elimination in the EU, is likely to allow developing countries to increase their share in world exports of tin semis. This is of limited importance, however, in view of the relatively small size of the world market for these products (US$ 153 million on average in 1990-1992.**26/**

108. **Phosphates**: International trade in phosphates has undergone a major change during the past two decades, in that it has been increasingly in phosphoric acid instead of phosphate rock. Indeed, while the value of world exports of phosphate rock has increased by 192 per cent between 1970-1972 and 1990-1992, from US$ 436 to 1,271 million, that of world exports of phosphoric acid was multiplied by almost 16 during the same period, from US$ 71 to 1,117 million. For developing countries, the change is even more pronounced: Their exports of phosphoric acid were multiplied by 28 during the past two decades, from US$ 23 to 642 million. As a result, only 22 per cent of world phosphate rock production enters international trade without further processing, against 49 per cent two decades ago. Phosphatic fertilisers, particularly superphosphates, provide another US$ 2,319 million of world exports. Developing countries have increased their share in this sector. They accounted in 1990-1992 for 66 per cent of world exports of phosphate rock, against 54 per cent in 1970-1972, and for 58 per cent of world exports of phosphoric acid, against 33 per cent in 1970-1972. Globally, however, they have become net importers, particularly of phosphoric acid.

109. Before the Uruguay Round, the phosphates sector was characterized by a significant degree of tariff escalation in two of the three major markets reviewed. Phosphate rock entered duty free into the three major markets reviewed. Phosphoric acid, however, faced a tariff of 11.0 per cent in the EU and 3.9 per cent in Japan, but no duty in the United States, the world's largest producer and exporter. Finally, phosphatic fertilisers faced significant tariffs in the EU (4.8 per cent on average) and Japan (5.8 per cent), but entered duty free into the United States.

110. Under the Uruguay Round Agreement, tariff concessions were significant. The EU reduced by half its duty on phosphoric acid (from 11 to 5.5 per cent) but made no tariff reduction on phosphatic fertilisers. Japan lowered its tariff on phosphoric acid from 3.9 to 3.3 per cent, and eliminated its 5.8 duty on phosphatic fertilisers. The significant lowering of tariff escalation on phosphoric acid and phosphatic fertilisers in the EU and Japan is likely to lead to some expansion of consumption and trade in these products, and to allow developing countries to increase their local processing of phosphate rock before export.

111. **Industrial minerals**: Several industrial minerals, which were hardly traded at the international level two decades ago, have shown strong dynamism in terms of growth of their world exports. Thus, for example, between 1970-1972 and 1990-1992, the total value of world annual exports was multiplied by 18.5 times for granite (from US$ 38 to 709 million), by 6.2 times for marble (from US$ 51 to 312 million), by 6.3 times for salt (from US$ 112 to 706 million), by 6.9 times for magnesite (from US$ 97 to 666 million) and by 5.2 times for borates (from US$ 34 to 176 million). Developing countries have been able to increase significantly their market shares of some of these minerals, particularly for granite and borates, but have simply maintained or even lost market shares of others. For these products, which usually entered duty free in the three major markets reviewed, it is expected that they will benefit indirectly from the additional overall growth of consumption and industrial activity expected as a result of the implementation of the Uruguay Round Agreement.

Notes

1. It is useful to recall, in this connection, that a study on the expected outcome of the Uruguay Round in the agricultural sector had already been undertaken by the UNCTAD secretariat and WIDER before the Round was over. This study was based on an econometric model developed by UNCTAD which incorporated the precise parameters of the Uruguay Round. It focused on prices and trade flows. It concluded that the Uruguay Round would have little impact on volumes and prices of tropical agricultural commodities exported by developing countries, but would result in both higher export volumes and higher prices for food commodity exporting countries. This study coupled with the concern expressed by FAO regarding food deficit developing countries has influenced the outcome of the Uruguay Round, leading to the adoption by GATT of the Decision on Measures Concerning the Possible Negative Effects of the Reform Programme on Least Developed and Net Food Importing Developing Countries.)

2. Methodology:

- An attempt has been made to deal, as far as possible, with specific commodities and markets, rather than to rely on averages for sectors and groups of countries. Whenever it was necessary to resort to averages of several tariff lines, both arithmetic and weighted averages were calculated. Averages weighted by import values have the advantage of reflecting the relative weight of the various products in the imports of the country considered, but may underestimate the rate of protection since high tariffs, which discourage imports, receive correspondingly low weights. In an extreme case, a prohibitive tariff resulting in zero imports will not be reflected at all in the average. Averages weighted by production or consumption in the

importing country would be more appropriate, but these are more difficult to calculate because of lack of sufficiently detailed statistics. Thus, for example, tariff item HS 0207 (poultry meat, fresh, chilled or frozen) is subdivided in the schedule of the EU into 86 different tariff lines, with 36 different levels of customs duty, expressed either *ad valorem* or in ECU per ton. For the above reasons, arithmetic averages were selected. It should be stressed, however, that averages give only some general indications about the level of protection and should not replace examination of specific rates on specific products.

- Specific rates of duty were, to the extent possible, converted into *ad valorem* equivalents by using the 1990-1992 average import unit value for the country concerned, or for a neighbouring representative market or for the world, if the former is not representative.

- The focus of the review at this stage has been on the three major importing markets, namely: the EU, Japan and the United States of America. Reference to other important markets has also been made, where relevant.

- The Uruguay Round country tariff schedules present both base rates and post-Uruguay Round rates of duty. In some cases, in particular for Japan, the rates actually applied before the Uruguay Round were often significantly lower than the base rates, and in some cases even lower than the post-Uruguay Round bound rates. A comparison between the base rates and the post-Uruguay Round rates may, therefore, overestimate the extent of actual tariff reduction under the Uruguay Round, although the rates that would be actually applied after the Uruguay Round might be lower than the Uruguay Round-bound rates. For the purposes of this study, bound rates are, however, more important in that they alone provide the necessary security of access for investment decisions. For this reason, therefore, comparisons have been made between base rates and post-Uruguay Round rates of duties, unless otherwise indicated.

- Preferential rates of duty under the Generalized System of Preferences (GSP), those granted by the EU to the ACP countries or to other associated countries, those granted by the United States under the Caribbean Basin Initiative, and those under other regional preferential trade arrangements are not covered, unless specifically indicated for illustrative purposes. The study focuses on the MFN rates of duty, which, unlike the preferential ones, are generally bound and not limited by quantitative ceilings.

3. A preliminary attempt to address this issue had been made in the report prepared by the UNCTAD secretariat for the Ad Hoc Working Group on Trading Opportunities in the New International Trading Context. (See UNCTAD, TD/B/WG.8/2, 19 June 1995, paragraphs 20 and 75).

4. See document TD/B/CN.1/30/Add.2.

5. Commodities mean, unless otherwise specified, total non-fuel primary commodities: the sum of agricultural primary commodities and mineral commodities defined as SITC section 0, section 1, section 2 (less group 233: synthetic rubber, and groups 266, 267: synthetic fibres), section 4, division 68 (all metals except iron and steel) and item 522.56 (alumina). This does not include precious metals and gemstones.

6. Throughout this report, unless otherwise specified, developing countries refers to all developing countries excluding China, the Democratic People's Republic of Korea, Mongolia and Viet Nam. The latter developing countries, which were, until 1994, classified as "Socialist Countries of Asia", are also covered whenever the availability of consistently reliable statistical series allows it.

7. "The Results of the Uruguay Round of Multilateral Trade Negotiations", GATT, Geneva, November 1994 (pp 27-38).

8. For a fuller description of the URAA, see in particular TD/B/WG.8/2, Chapter I, op. cit.

9. The results of the calculations made by the UNCTAD secretariat to estimate the *ad valorem* equivalents of the specific duties established under the tariffication process, are presented in **table 6** of the Statistical annex. These calculations are on a more disaggregated list of commodities than is the case for calculations made elsewhere, particularly by the World Bank, and relate to specific representative products. Moreover, in order to show how the results are affected by the selected reference period, calculations were made using average exchange rates and world import unit values for two periods, namely, 1986-1988, the agreed reference period for the tariffication process, and 1990-1992, the most recent period for which reliable and comprehensive statistics are available. These calculations resulted in *ad valorem* tariff equivalents that are generally lower, particularly in the case of the EU, than those estimated by the World Bank (see "Agricultural Liberalisation and the Uruguay Round ", by Dale E. Hathaway and Merlinda Ingco, January 1995, tables 2a and 2b).

10. An appreciation of the local currency would, conversely, make imports relatively cheaper.

11. If a country's imports of a product subject to tariffication exceeded 5 per cent of domestic consumption during the 1986-1988 base period, the Member must maintain this access under the URAA. Where there are no significant imports, Members should establish "minimum access opportunities". These should represent in the first year of the implementation period not less than 3 per cent of corresponding domestic consumption in the base period 1986-1988 and should be expanded to reach 5 per cent of that base figure by the year 2000.

12. If a developed country opts for this special treatment, it must commit to an increase in minimum access of 4 per cent of base period consumption in 1995, increasing to 8 per cent by 2000 (for a developing country, 1 per cent in 1995 and 4 per cent by 2004).

13. These include: direct subsidies, disposal by Governments of non-commercial stocks for export at below domestic market prices, subsidies to reduce the costs of marketing exports, including handling, upgrading and other processing costs as well as the costs of transport and freight, and subsidies on agricultural products contingent on their incorporation in exported products (URAA, art.9).

14. Respectively, 14 and 24 per cent reductions for developing countries over the same period 1995-2000.

15. Annex 3 to the URAA stipulates the modalities for the calculation of the AMS on a product-specific basis. The AMS for each basic product includes some or all of three components, expressed in total monetary value: (a) market price support, (b) non-exempt direct payments, and (c) other non-exempt policies. Market price support is calculated using the gap between an external reference price and the internal administered price for the product, multiplied by the quantity of production eligible for support. Support provided through non-exempt direct payments and other non-exempt policies, such as input subsidies and marketing cost reduction measures, is measured either by also using the price gap methodology, or by budgetary outlays and revenue foregone by Governments. The sum of the support provided by these three components, less producer assessments, equals the AMS for a specific product.

16. These domestic support programmes include: research; pest and disease control; training, extension and advisory services; inspection services; public stockholding for food security; domestic food aid; decoupled income support the amount of which is not related to, or based on, the type or volume of production, domestic or international prices, and the factors of production employed; government financial participation in income insurance and income safety-net programmes; disaster relief; structural adjustment assistance

(provided through producer retirement programmes, resource retirement programmes, and investment aids); environmental or conservation programmes; and regional assistance programmes (URAA, annex 2). Some internal support policies by developing countries are also exempt from reduction commitments (URAA, art.6.2). These include, in particular, investment subsidies which are generally available to agriculture, support to encourage diversification away from growing illicit narcotic crops, and input subsidies to low-income or resource-poor producers.

17. See in particular TD/B/WG.8/2, chapter III, op. cit.

18. Pharmaceuticals, construction equipment, medical equipment, steel, beer, furniture, farm equipment, distilled spirits, and pulp and paper.

19. Up to four years in normal circumstances, with possible extensions in special circumstances up to a maximum of eight years.

20. As long as its share of imports of the product concerned in the importing Member does not exceed 3 per cent, and that developing country Members with less than 3 per cent share collectively account for not more than 9 per cent of total imports of the product concerned.

21. "Impact of the Uruguay Round on Agriculture" (CCP: 95/13), FAO, Rome, January 1995.

22. Wheat, rice, coarse grains, fats and oils and oilmeals, meat, milk, butter, coffee, cocoa, tea, bananas, sugar, bovine hides and skins, and rubber.

23. "Report on Evaluating the Outcome of the Uruguay Round Agricultural Agreement using the Agricultural Trade Policy Simulation Model", by Professor Odd Gulbrandsen, consultant to UNCTAD, Geneva, January 1995.

24. This is the Rural-Urban North-South (RUNS) model, which assumes neither economies of scale nor imperfect competition. It contains 20 product sectors, of which 15 are agricultural (wheat, rice, coarse grains, sugar, meat (beef, veal and sheep; and other meats), coffee, cocoa, tea, vegetable oils, dairy and dairy products, other food, wool, cotton and other non-foof). Minerals and metals are not included explicitly, although fertilizers is. See also Goldin, I. and D. Van der Mensbrugghe, "The Uruguay Round: An Assessment of Economywide and Agricultural Reforms", paper presented to the World Bank Conference on the Uruguay Round and Developing Countries, Washington, 26-27 January 1995.

25. It is noted, however, that "Canada is already relatively open" but that the "dairy sector remains a bastion of protection" (ibid., p.12). Australia and New Zealand are cited, by contrast for their liberalization, so great that "virtually the only remaining protected sectors will be sugar and dairy" (ibid.).

26. See the relevant in-depth studies on individual commodities issued by the UNCTAD secretariat as well as by other organizations in the annotated bibliography contained in document TD/B/CN.1/30/Add.2.